

Our species of *Plagodis* Hübn.

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The species which fall under this genus are rather well defined, and it would seem quite unnecessary to revise them. A curious mingling of two species under one name has occurred, however, in the case of *keutzingi* Grote. As Dr. Packard was about to publish his monograph in 1876, Professor Grote sent him a specimen, with description, he says, and name, *keutzingi* for publication (Can. Ent., VIII, p. 112). Doctor Packard mingled with it specimens from various places, which he described under the name of *keutzingaria* Pack., and figured them (Mono. plate XI, fig. 44), referring to the Grote specimen, in a few descriptive lines as a darker form. This drew a vigorous protest from Grote (Can. Ent., VIII, p. 154), who insisted that his name, *keutzingi*, should hold. Whether as the result of this or not, I do not know, but a figure of the Grote specimen appears (Mono. plate XIII, fig. 51), and in listing them (Dyar) *keutzingaria* Pack. is made a synonym of *keutzingi* Grote. Here the error occurs. I have taken both in the Catskill Mountains, the latter rarely, and they are about as distinct, one from the other, as could well be. Both names cannot have a place on our list as separate species, and as that of Professor Grote is recognized as entitled to priority, I propose for the other species the name *altruaria* with *keutzingaria* Pack. as its synonym. On the occasion of a recent visit to Reading, I saw in the collection of the late Doctor Strecker a ♂ and ♀ of a species, a single ♂ of which, taken at Scranton, Pa., came to me some two months ago, through the kindness of Mr. M. Rothke, of that city. They were labeled *Plagodis purpuraria* Pack. Doctor Packard may have given this name to Doctor Strecker, but he never published any description of it. The species must be quite rare, for I have never seen it in any other collection. Those in the Strecker collection were also taken in Pennsylvania. How markedly different from our other species it is, the following description, under the name selected by Doctor Packard, will show:

Plagodis purpuraria n. sp.

Expanse 29-30 mm.; forewings deeply notched at anal angle, as in *keutzingaria*, but narrower; palpi reddish-purple, tipped with orange; front, vertex, base of patagia, and costa at base, deep reddish-purple; collar gray, tinged with lilac; antennæ yellow, tipped with violet; thorax in front, and patagia, bright brownish orange, which rapidly fades into pale yellow posteriorly; abdomen pale yellow, a few scattering scales, centrally, of jet black, at tip and beneath orange, the whole washed thinly with violet; forewings soft, bright, brownish orange without basal lines, striations, or discal spots. This color ceases abruptly, extradiscally at costa, about two-thirds out, thence inwardly in a straight line to cell, at base of vein 3, it runs nearly straight to inner border of wing, thus forming a slight angle. Inwardly along this margin there is a diffuse shading of brownish from costa to vein 3, below which black and violet shades are intermingled and form the suggestion of a vine, while outwardly a wide border, broadest centrally, of lilac scales (changing to white at costa and along it to apex), disclosing as it fades out about half way to margin, the bright, brownish orange ground color which succeeds it, submarginally from apex to notch. At inner margin the subterminal space is nearly filled with a cloud of black and purple scales, washed with lilac. Fringe orange above notch, purple within it. Hind wings pale yellow, marginally washed with orange. On inner margin two thirds from base, a blotch of orange, black and purple scales indicate the termination of a shadowy line crossing the wing centrally. Before anal angle a few black and purple scales, overspread with lilac, not so prominent as on fore wings. Fringe orange, shading into lilac at anal angle. No discal dots. Beneath forewings bright orange above cell, from base to apex below cell, almost white. A diffuse band of orange crosses both wings centrally. Hind wings pale orange basally, pale yellow to margin, beyond central cross band. No discal dots on either wings, legs brownish orange washed with purple.

Type ♂ in my collection. The ♀ in the Strecker collection should be a type and the ♂ a co-type, but I have no descriptive notes of the former, and while it presents no difference in color

or markings from my ♂ that I could discover, I refrain from giving it that standing at present. The species is a beautiful one, as will be seen, and its markings approach in style the *emargataria* Gn. That species is larger, a brown or *café au lait* color, slightly strigate, with prominent discal dots and quite different in appearance.

Kempii Hulst, the type of which is a ♀, seems to me an extreme varietal form of *alcoolaria* Gn. It is a fresh specimen, with the ground color paler, less strigate or mottled, with the cross lines more sharply drawn; otherwise the same. I would list our species as follows:

<i>Scrinaria</i> H-Sch.	<i>Fervidaria</i> H-Sch.
= <i>subprivaria</i> Walk.	= <i>excurvaria</i> Mor.
= <i>floscularia</i> Grote.	<i>Alcoolaria</i> Gn.
var. <i>rosaria</i> Grote.	var. <i>kempii</i> Hulst.
<i>Keutzingi</i> Grote.	<i>Phlogosaria</i> Gn.
= <i>nigrescaria</i> Hulst.	<i>Emargataria</i> Gn.
<i>Altruaria</i> Pears.	= <i>arrogaria</i> Hulst.
= <i>keutzingaria</i> Pack.	<i>Purpuraria</i> Pears.
	<i>Approximaria</i> Dyar.

THE VITALITY and power of resistance of the sheep tick, *Mclophagus ovinus* Linn. Being interested in a woolpulling establishment, I have had the opportunity of observing the terrible punishment inflicted upon the sheep ticks, after the sheepskins are brought into the shop, and how they come out whole and very much alive after said punishment. The skins are brought in all day up to six o'clock P. M., and are put into large cement vats with running water, in which the skins are totally submerged; they remain in these vats over night, and the following morning are run through a scrub machine, a machine for cleaning the wool, with steel blades on a cylinder, revolving nine hundred times per minute; these blades and the force of water make the wool as white as the driven snow, taking out burs and dirt. The skins are then put into a hydro-extractor revolving twelve hundred times a minute, from which the skins come out very nearly dry; they are then painted on the pelt side with a very strong solution of sulphide of sodium, folded, wool out, and laid in piles twelve high; in this position they remain for at least twenty-four hours, when they go to the pullers' beams, and it is here that the pullers have their troubles, for unless they see the ticks first, the latter will get under their clothing wherever there is a chance, and try to make up the time lost in the two or three days' fast. They finally succumb, however, after the wool is pulled and goes into the drying machine, where the temperature is two hundred and fifty degrees Fahrenheit.—FRANK HAIMBACH, Philadelphia.